

Strand: Measurement

Grade: 3/4

School: Glendale Public School

Lesson Goal	Diagnostic lesson for linear measurement
Curriculum Expectations	<ul style="list-style-type: none">- Estimate, measure, and record length, height, and distance, using standard units (i.e. centimetre, metre, kilometre) [grade 3]- Compare standard units of length (i.e. centimetre, metre, kilometre), and select and justify the most appropriate standard unit to measure length [grade 3]- Estimate, measure, and record length, height, and distance, using standard units (i.e. millimetre, centimetre, metre, kilometre) [grade 4]- Describe, through investigation, the relationship between various units of length (i.e. millimetre, centimetre, decimetre, metre, kilometre) [grade 4]
Big Idea(s)	<ul style="list-style-type: none">- The use of standard measurement units simplifies communication about the size of objects- Knowledge of the size of benchmarks assists in measuring

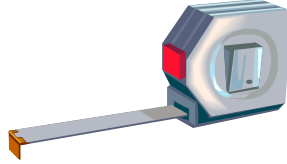
3 Part Lesson Plan		Materials
Getting Started (Minds On...)		
Instructional Grouping: Small groups <ul style="list-style-type: none">- Students are placed in groups and each group is given a non-standard measuring tool such as pencils, paper clips, etc. They are also given a sheet of chart paper with a compass rose drawn in the top left and an X marked in the middle of the sheet- Students are told that they will be given directions to find a treasure. They are to start at the X and follow the directions. Directions will be given in “units” and each “unit” will be one of their non-standard measuring tools- Students are given the following directions: Move 4 units south. Now move 5 units west. Now move 3 units south. Now move 7 units east. Finally, move 2 units north- When finished, students go on a gallery walk to see where other groups ended up on the treasure map- Students are brought to the carpet to discuss the activity. Teacher asks why each group ended up in a different spot? Teacher shows where the treasure actually was by showing a map with the path drawn in centimetres. Teacher elicits why we use standard units of measurement such as centimetres- Students are asked to look around the class for items that could be used as a benchmark for 1 centimetre. They are shown how their fingers could be used as benchmarks		<ul style="list-style-type: none">- Chart paper- treasure maps- Coloured tiles- Pencils- Paper clips- Pieces of string- Snap cubes- Playing cards
Working On It (Action!)		
Instructional Grouping: Pairs <ul style="list-style-type: none">- In pairs, students are given a “Measure Hunt” recording sheet (attached below) and are asked to first decide whether they will use centimetres or metres to measure each object, then to first estimate, then measure each item- If students complete the measurement of the items listed, they can add their own items to measure		<ul style="list-style-type: none">- “Measure Hunt” recording sheet- Rulers- Metre sticks
Reflecting and Connecting (Consolidate/Debrief)		
Debrief Strategy: Whole class discussion <ul style="list-style-type: none">- Students are asked what went well/what was challenging		

<ul style="list-style-type: none"> - The teacher corrects misconceptions that students demonstrated - Students are asked to relate the ruler to the metre stick, eg. They both have centimetres, there are 100 centimetres in 1 metre - Students are asked when it is mos appropriate to use centimeters vs. metres 	
Follow-up	

“Measure Hunt” recording sheet attached below

Names: _____

"Measure Hunt"



Estimate and measure the following items (don't forget to include your unit of measure):

Item	Estimate	Measure
Math Text Book		
The longest side of your desk		
The height of the door frame		
The height of the floor to the door knob		
The Hallway		
The Coat Rack		